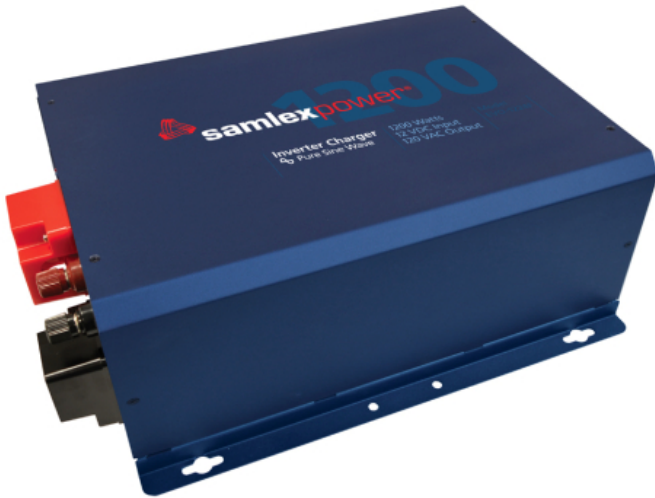


EVO-1212F : Evolution F-Series Inverter/Charger



Price: CAD \$1,499.00

Product Categories: [Inverters](#), [Off-Grid : Inverter/Chargers 1-1.9kW](#), [Shop](#)

Product Tags: [1200 watt](#), [1200w](#), [12v inverter](#), [24V](#), [24v inverter](#), [back-up](#), [back-up power](#), [cabin](#), [cabin inverter](#), [canada](#), [emergency power inverter](#), [evo](#), [evo-1212f](#), [evo-1212f canada](#), [evo-1212f-hw](#), [inverter/charger](#), [rv](#), [samlex evo](#), [samlex inverter](#), [tiny house inverter](#)

Product Page:

<https://www.modernoutpost.com/product/evo-1212f-evolution-f-series-inverter-charge/>

Product Variants

- EVO-1212F : Evolution F-Series Inverter/Charger - GFCI (Front Panel Outlets) ()
- EVO-1212F : Evolution F-Series Inverter/Charger - Hardwire (With Terminal Block) ()

Product Summary

The EVO-1212F is one of the most complete inverter packages available for smaller applications such as cabins, tiny homes, RVs, specialty vehicles, and emergency back-up power applications. Advanced integration options provide a fantastic level of control over how the inverter works with battery sources, AC input, and your loads. A big surge capability handles loads like pumps, compressors, and power tools, plus full programmability and **lithium battery** support. Get it all without spending a fortune!

Available with integrated GFCI outlets, or as a hardwire.

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The EVO-1212F is a pure sine wave inverter/charger that connects to a single AC input source (grid or generator) and integrates battery charging with optional solar input (we explain more about this unique feature below). The EVO provides 6 programmable charging profiles. **For use with Lead Acid or Lithium Batteries.** With 3x surge capacity, it is able to handle large start-up demands like pumps. Available with integrated GFCI outlets, or as a hardwire unit.

Order the **EVO-RC remote panel** for full programming capability.

Only need to power a fridge? Maybe add a few lights and AC outlets for computers? Microwave or induction stovetop? Toaster? Blender? This inverter is a great choice. Lights, fridge and computers all at the same time, with Powersave mode for

reducing inverter self-consumption at times when nothing is needing power. A solar designer's dream!

Certainly, at 1200W, you can't operate a microwave and a blender at the same time, but if you are of the minimalist mindset, and know how to run one appliance at a time, you can manage easily. With its surge capability, the EVO-1212F can run a microwave, charge a laptop, and run lights, and handle the sudden demand of a fridge turning on.

A Scale Of Two Inverters...

You've heard the expression "With great power comes great responsibility". Oddly enough, this pertains to inverters and battery system design too. A general design principle is to balance the size of the draw to the capacity of the battery bank. At peak output, the battery bank should be able to easily support the inverter's demands. If you increase your inverter size, you'll need to increase your battery bank size in the same ratio.

This is especially important when considering lithium batteries due to their specific charge/discharge specs. And for lithium, doubling the inverter size will likely mean doubling the battery bank which can blow your budget quickly!

Sizing Example...

1,200W inverter : 2.4kWh lithium battery bank = \$3,600 (est)

2,000W inverter : 4kWh lithium battery bank = \$5,300 (est)

Calculate your loads, and choose your inverter size carefully!

Samlex EVO-1212F Features

Adaptive Battery Charger Option for AGM & Flooded Lead Acid Batteries -

6 programmable charging profiles - 2, 3 and 4 stages with Equalization - Algorithm monitoring in the Bulk Stage assesses the battery's condition. The remaining charging stages are based on the battery's condition rather than a pre-set charging time. - Reduces excess charging time and extends life of battery - Note that adaptive charging is not required for lithium battery banks

Ideal Pairing With Lithium Battery Systems - Lithium battery preset, plus full programmability of all set-points and charging/discharging parameters. - Ability

to set low-battery thresholds at levels appropriate for lithium so you can get the longest life from your battery investment.

Fast Transfer Switch

- Zero transfer time when switching from Inverter to AC input source. When AC input source comes on, the inverter synchronizes with the incoming wave form and then transfers instantly at zero crossing without interruption to the load.

Big Surge Capacity (Active Power Boost) - The inverter has a surge capability of 3X its continuous power rating, allowing it to turn on loads with high starting surge. - Inverter loads can exceed the continuous power output by the Power Boost Allowances without triggering and overload fault. - There is no need to upsize to a larger inverter/charger to handle a heavy surge load, resulting in reduced costs.

Solar Input - Adjusts the Charger to Prevent Overcharging

Connect a solar charge controller (up to 50A) directly to the EVOTM through the Battery Charger External DC Input terminals.

- External charging current is monitored to free up more power from the grid to be available to the load while charging. - ONLINE Mode can be used to prioritize Batteries/Inverter over the grid, ideal for those who want to operate primarily on solar power, even when the grid is available (when grid is costly, or unreliable).

State-of-the-Art Technology - Multiple physical points of protection monitoring are scanned up to 10,000 times per second to detect adverse internal and external conditions.

The EVOTM is practically indestructible. The EVOTM will detect fault conditions and initiate a healthy shutdown before any damage can be done.

AC Input / Output Option

AC Power Cord Inlet and Duplex GFCI outlet: EVO-1212F/1224F;

hardwired: EVO-1212F-HW/1224F-HW

The EVO-RC-PLUS remote control (sold separately) can be used to capture detailed EVOTM performance data, stored on a removable 16GB SD Card. Advanced features for programming various parameters and modes of operation. 4 rows of 20 character alpha numeric LCD display for messaging.

The EVOTM uses five temperature sensors placed throughout the unit to determine operation of 2 speed controlled cooling fans. Reduces unnecessary fan noise and energy consumption by only running when and where the fans are needed.

Samlex EVO-1212F Specifications In Brief

Input : 12 VDC (9.1 - 17 VDC)

Output Voltage : 120 VAC (Pure Sinewave)

Output Power : 1200 Watts

Output Surge : 3600 Watts

Battery Charger : Max 60A DC

Transfer Switch : 30A SPDT

Provided Outlets : GFCI (Terminal block with faceplate cover provided in HW 'hardwired' model)

Fuse : External (not included)

Remote Control : [EVO-RC-PLUS \(Optional - purchase separately\)\]](#)

Weight :17.6 kg / 38.8 lbs

Dimensions : 324 x 415 x 148 mm / 12.76 x 16.34 x 5.83 in

Safety : Intertek-ETL listed: Certified to CAN / CSA STD. C22.2 No. 107.1-01 ;

Conforms to ANSI / UL STD. 458. Certified to FCC Part 15(B), Class A

Warranty : 2 Year Limited

Spec Sheet & Manual

[Download the Spec Sheet\]](#) [Download the User Manual\]](#)

Product Attributes

- Dimensions: N/A
- Model: GFCI (Front Panel Outlets), Hardwire (With Terminal Block)

Product Gallery

